

Work Order ID 151686

Wednesday, October 05, 2016 3:09:32 PM

646.3001

B 151 686

151686

Page 1

Item ID: 646.3001

PEV. N/C Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Lower Cutter Assembly

Start Date: 10/11/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 10/24/2016 Req'd Qty: 2.00

2

Customer:

Reference:

DAS

Approvals: Process Plan: 21

9-89

Date: OCT 06 2016

Tooling:

Date:

Run Start *NR1*

QC:

Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool # ' Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

646.3000

N/C

110

Pick Kit

0.00

110

Packaging

Memo

0.01

Packaging

3 OCT 19 2016

DAS
6
9-89

120

0.00

120

Small Fab

Memo

0.24

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598:

exp. date: 04/18

135479

3x

16/11/01 DAS
36
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 151686

Wednesday, October 05, 2016 3:09:32 PM

151686

Page 2

Item ID: 646.3001

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lower Cutter Assembly

Start Date: 10/11/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 10/24/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							
130						3			DAS 38
QC	Memo	0.07							NOV 01 2016
Quality Control									
140	Identify as per dwg & Stock Location: <u>CCF018</u>	0.00							
140						3	DAS 6		
Packaging	Memo	0.00					9-89		NOV 01 2016
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
150	QC21- Final Inspection - Work Order Release	0.00							
150							DAS 21		
QC	Memo	0.01					9-89		NOV 01 2016
Quality Control									

D16-11-01

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Wednesday, October 05, 2016 3:09:32 PM

Page 1

Work Order ID: 151686

151686

Parent Item: 646.3001

646.3001

Parent Item Name: Lower Cutter Assembly

Start Date: 10/11/2016

Required Date: 10/24/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21042L08		Purchased	No				Each	830.0000		38 <u>57</u>			DAS 6 9-89
MS21042L 08									**			OCT 19 2016	
Nut													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				GA				118					
				m134063				18					
				m135274				100					
				ST303				712					
				m135536				112					
				<u>m135566</u>				200		<u>57</u>			
				m135672				200					
				m135766				200					
646.3010		Manufactured	No			110	Each	15.0000	1	<u>23</u>			DAS 6 9-89
646.3010									**			OCT 19 2016	
LH Half													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				cck102				15					
				142499				15		<u>3</u>			
646.3011		Manufactured	No			110	Each	18.0000	1	<u>23</u>			
646.3011									**				
RH Half													
				<u>Location</u>				<u>Loc Qty</u>	<u>Loc Code</u>				
				cck102				18		<u>3</u>			
				148317				10					
				148577				8					
												OCT 19 2016	DAS 6 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																														
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																										
Description Work Order Deviation				Disposition																																																														
Root Cause		FAULT CATEGORY																																																																
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :				
Misidentified ☐	Past Due ☐																																																																	

Picklist Print

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Page 2

Work Order ID: 151686

151686

Parent Item: 646.3001

646.3001

Parent Item Name: Lower Cutter Assembly

Start Date: 10/11/2016

Required Date: 10/24/2016

Start Qty: 2.00

Required Qty: 2.00

646.3012 Manufactured No

110 Each

3.0000

1

646.3012

Lower Guide

**

OCT 10 2016

AS

Location

Loc Qty

Loc Code

CCK013

3

141006

3

646.3013

Manufactured No

110 Each

9.0000

1

646.3013

Blade

**

OCT 19 2016

DAS

6

9-89

Location

Loc Qty

Loc Code

cck104

9

148253

9

646.3014

Manufactured No

110 Each

12.0000

1

646.3014

Blade

**

OCT 19 2016

DAS

6

9-89

Location

Loc Qty

Loc Code

cck104

12

148275

12

646.3015

Manufactured No

110 Each

6.0000

1

646.3015

Blade

**

OCT 19 2016

DAS

6

9-89

Location

Loc Qty

Loc Code

cck103

6

147542

6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, October 05, 2016 3:09:32 PM

Page 3

Work Order ID: 151686

151686

Parent Item: 646.3001

646.3001

Parent Item Name: Lower Cutter Assembly

Start Date: 10/11/2016

Required Date: 10/24/2016

Start Qty: 2.00

Required Qty: 2.00

MS27039-08-19

Purchased

No

110

Each

276.0000

19

38-57

DAS
6
9-89

MS27039-08-19

**

OCT 19 2016

Screw

Location

Loc Qty

Loc Code

ST277

276

m135536

9

m135566

267

57

NAS1149FN832P

Purchased

No

110

Each

2,455.000

38

76-114

DAS
6
9-89

NAS1149FN832P

**

OCT 19 2016

Washer

Location

Loc Qty

Loc Code

GA

1537

M133769

89

M135058

1448

ST263

918

M135603

918

114

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



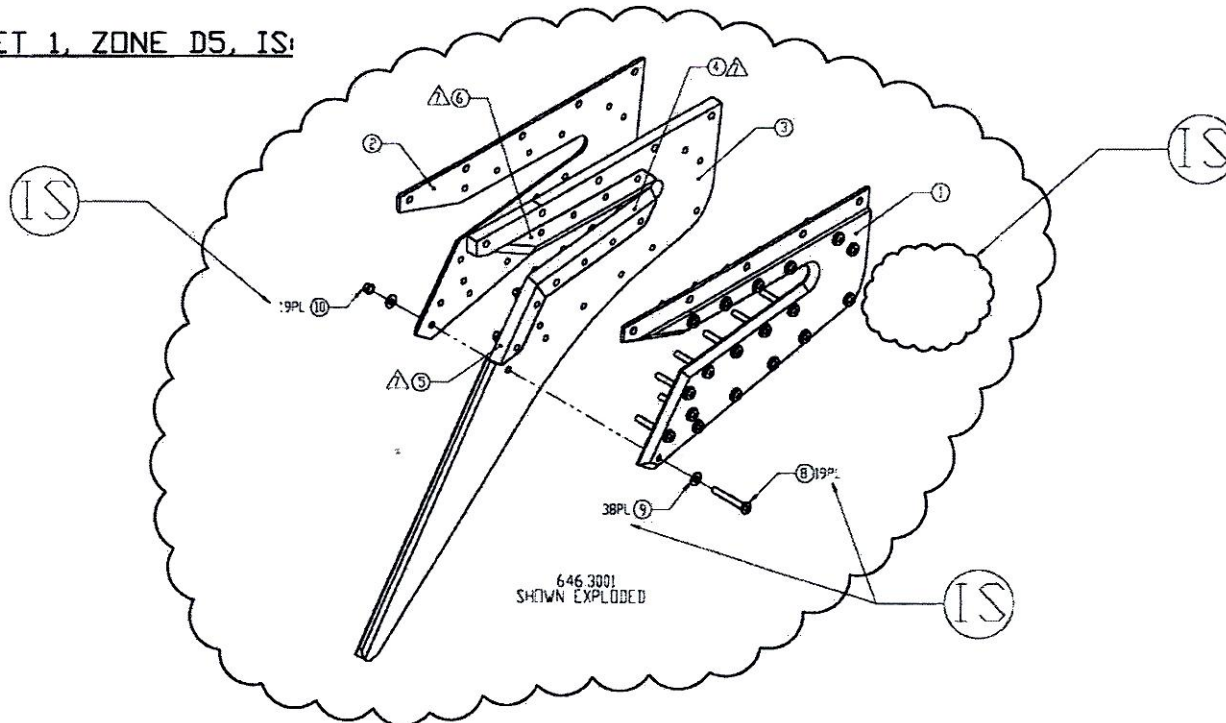
QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 02195		SHEET 1 OF 4	
	DWG NO. 646.3000	REV: N/C	PREPARED BY S. HUFF	DATE: 01/05/09
	EFFECT ON DWG ☐ INC. ☒ UNINC.			
	DWG TITLE: LOWER CUTTER ASSY			
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS		

SHEET 1, ZONE D5, IS:

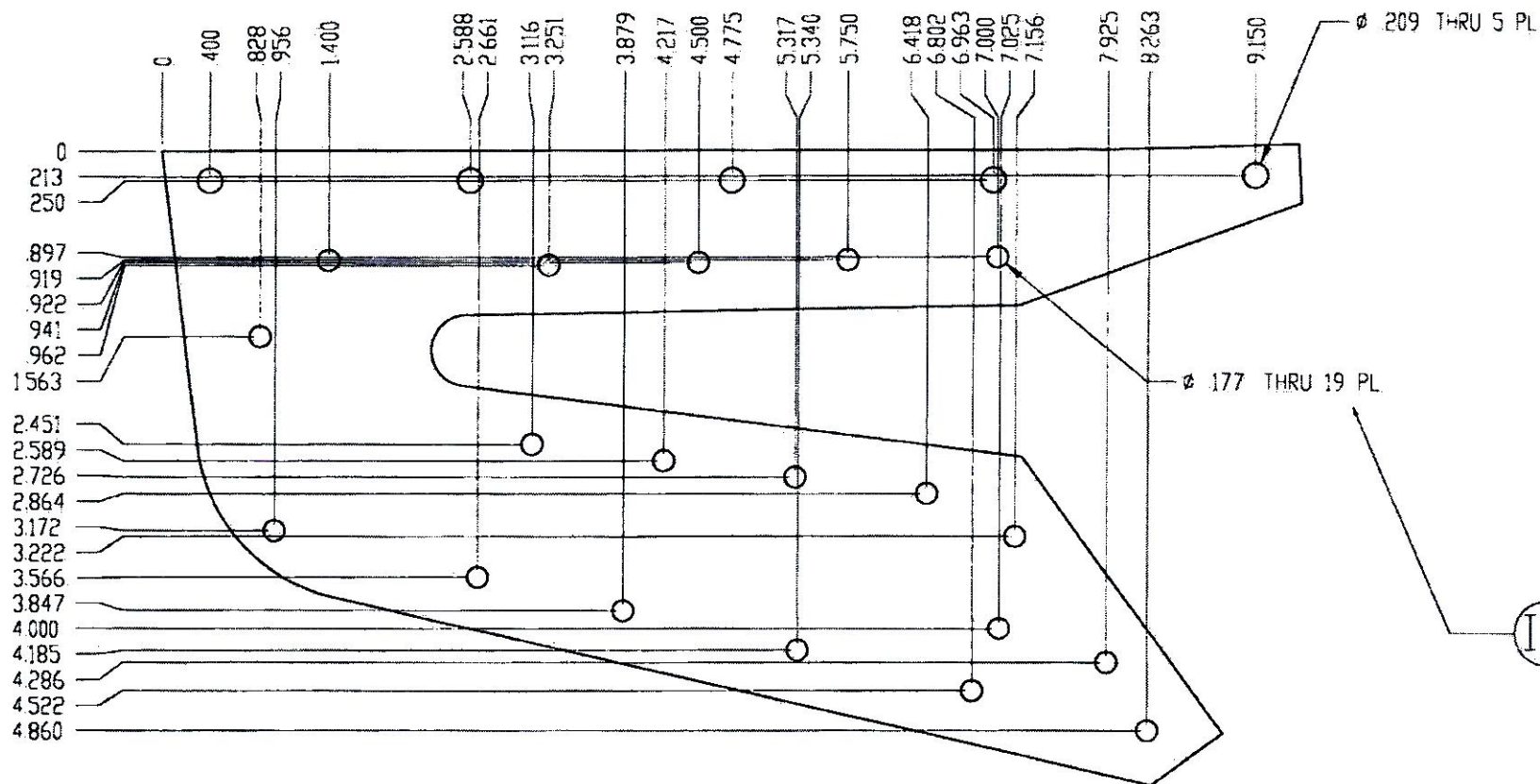


SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 151686 MWS
167006

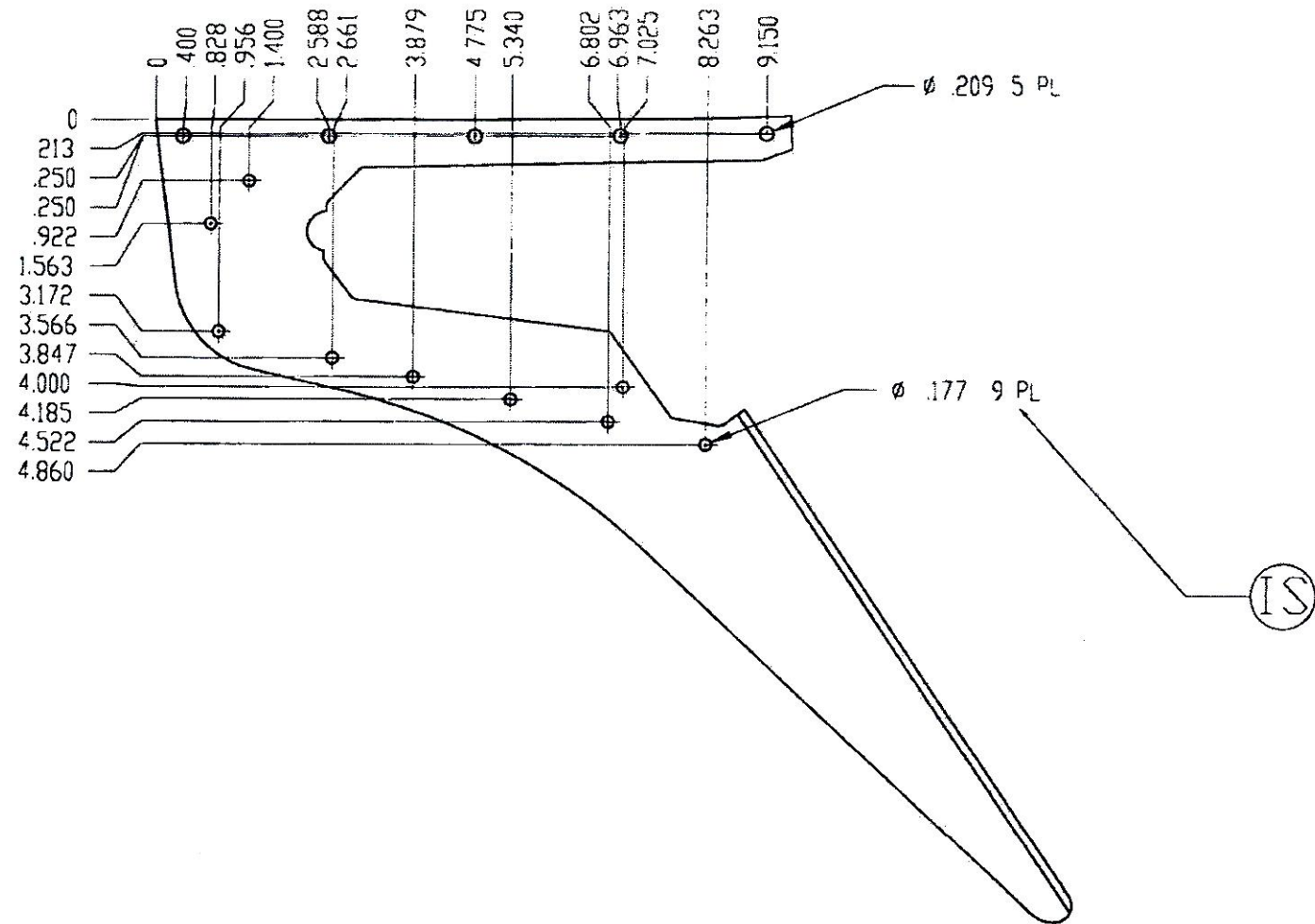
10	R	601.1541	19	LOCKNUT	MS21042L08
9	R	601.2764	38	WASHER	NAS1149FN832P
8	R	601.2765	19	SCREW	MS27039-0819
7	D	601.2766	2	RIVET	MS20470AD5-18
			.3001		
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:				☐ MDL ☒ INSTALL INSTRU ☒ ICA ☐ FMS ☒ BOM	CHANGE CATEGORY ☐ MAJOR ☒ MINOR
				DER REVIEW REQUIRED ☐ YES ☒ NO	

SHEET 3 IS:



SECTION A-A

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

SHEET 5 IS:

SECTION F-F

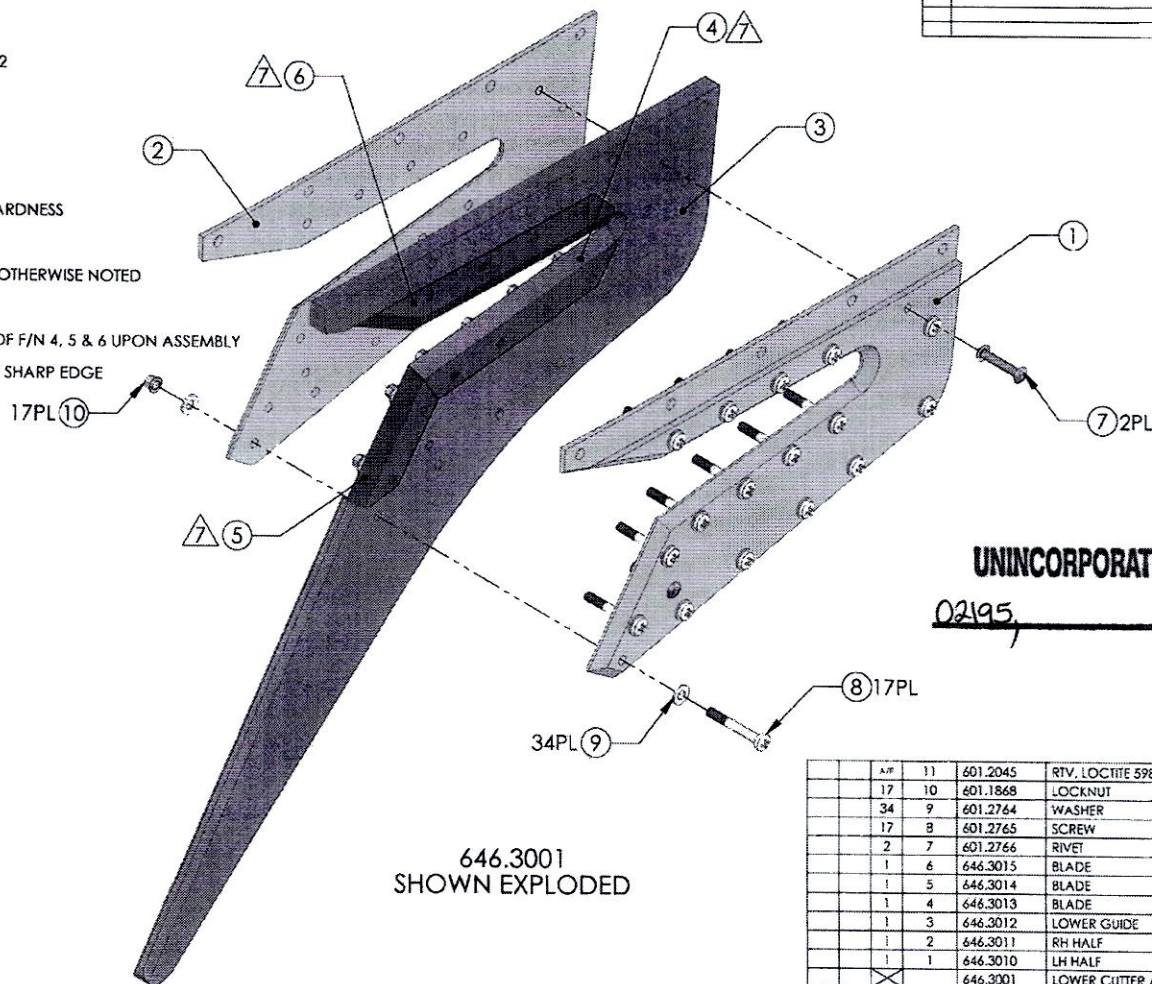


F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-50 PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
- 3 MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- 4 FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
- 5 DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
- 6 IDENTIFY IAW MPP-120
- 7 APPLY F/N 11 AS REQUIRED TO ALL FAYING SURFACES OF F/N 4, 5 & 6 UPON ASSEMBLY
- 8 CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE

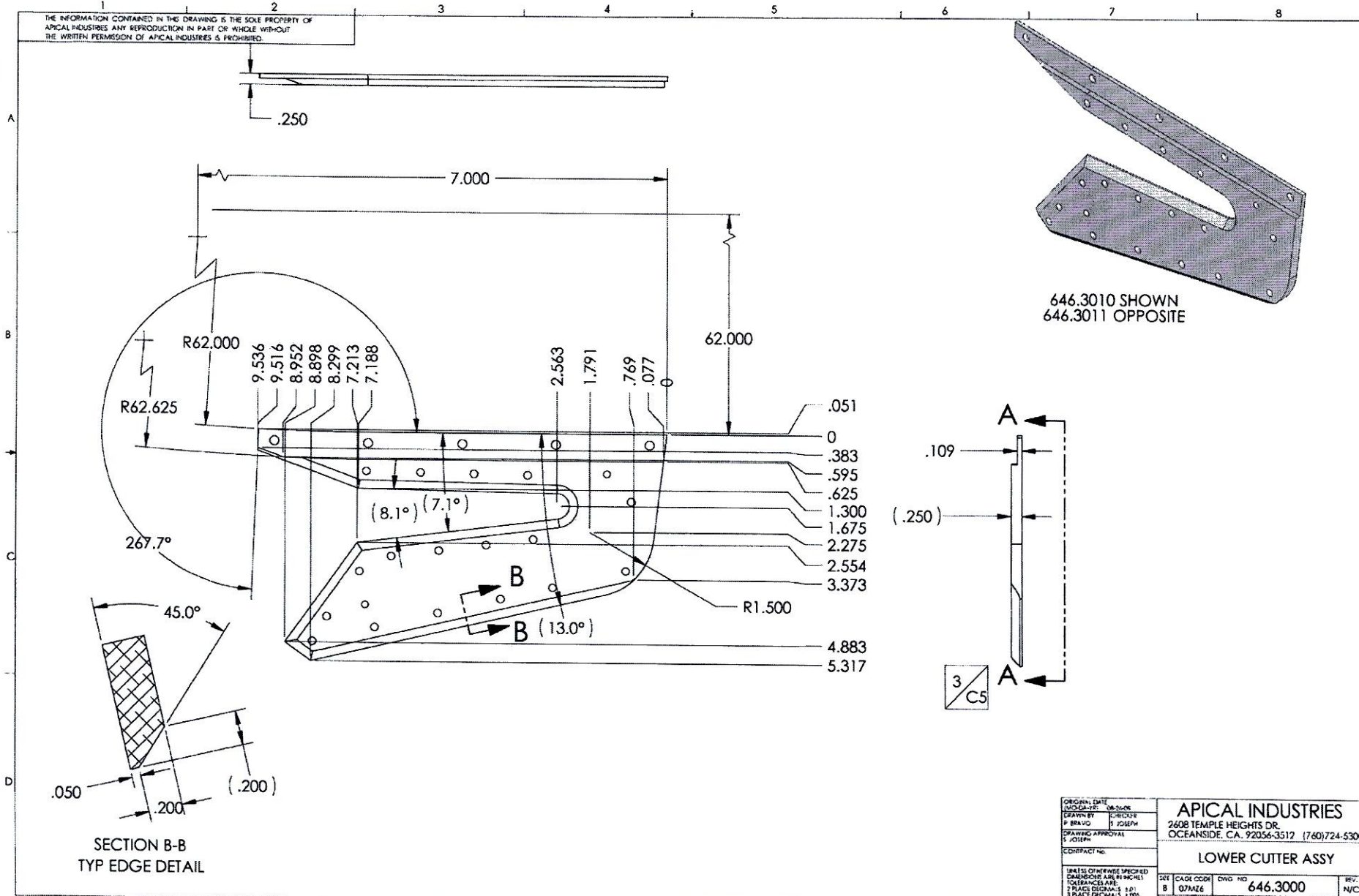


UNINCORPORATED ECN(S)

02195

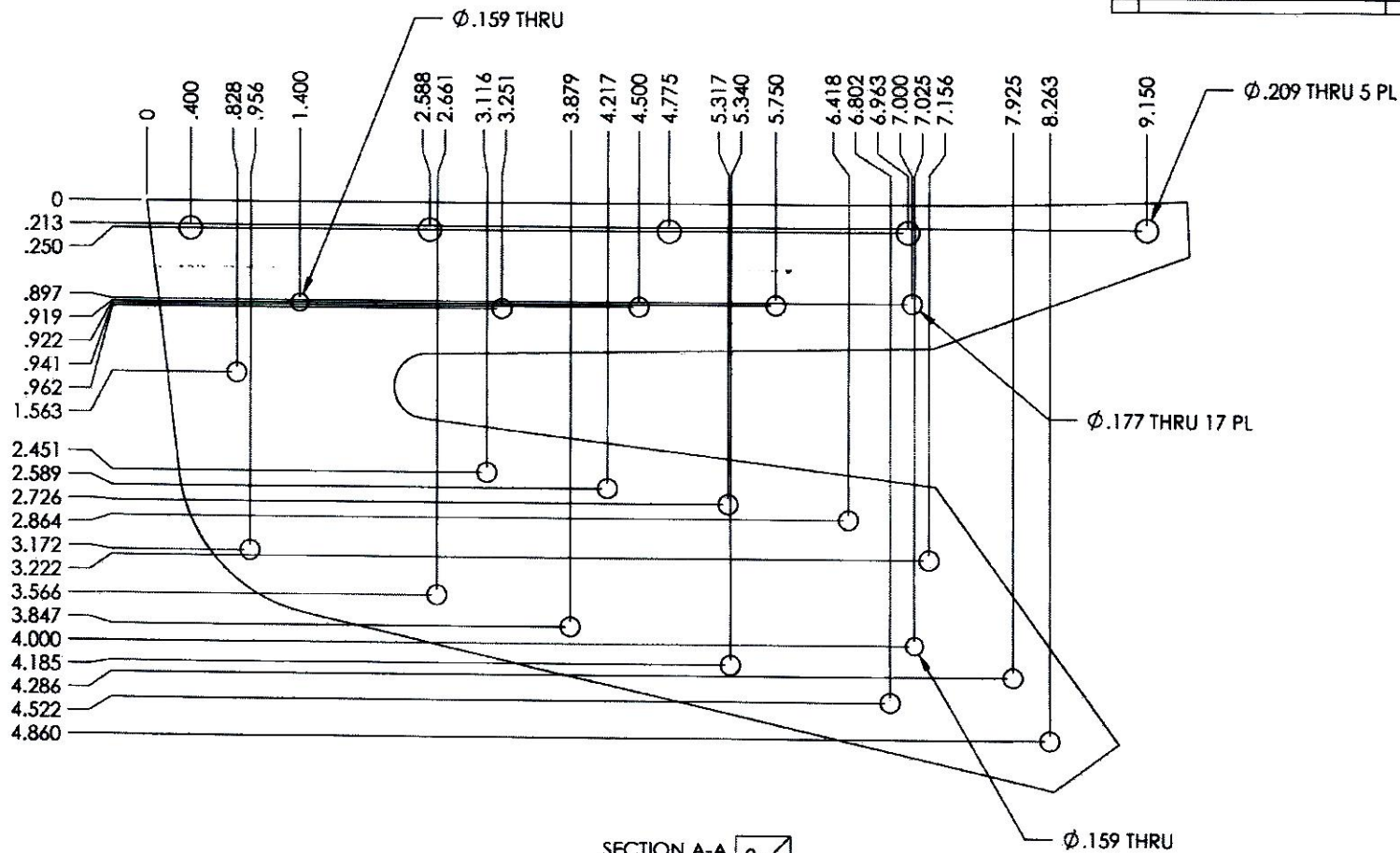
QTY	REV	FIND #	PART #	DESCRIPTION	MATL	SPEC.
17	10		601.2045	RTV, LOCTITE 598		
34	9		601.1868	LOCKNUT	M221643-08	
17	8		601.2764	WASHER	M221643-08	
2	7		601.2765	SCREW	M221643-08	
1	6		601.2766	RIVET	M221643-08	
1	5		646.3015	BLADE		
1	4		646.3014	BLADE		
1	3		646.3013	BLADE		
1	2		646.3012	LOWER GUIDE		
1	1		646.3011	RH HALF		
1	1		646.3010	LH HALF		
1	1		646.3001	LOWER CUTTER ASSY		
PARTS LIST						
APICAL INDUSTRIES						
2608 TEMPLE HEIGHTS DR.						
OCEANSIDE, CA. 92056-3512 (760)724-5300						
LOWER CUTTER ASSY						
REV	DATE	BY	CHKD	QTY	REV	QTY
B	07/26/06					
SCALE: NONE				SHEET 1 OF 6		

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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

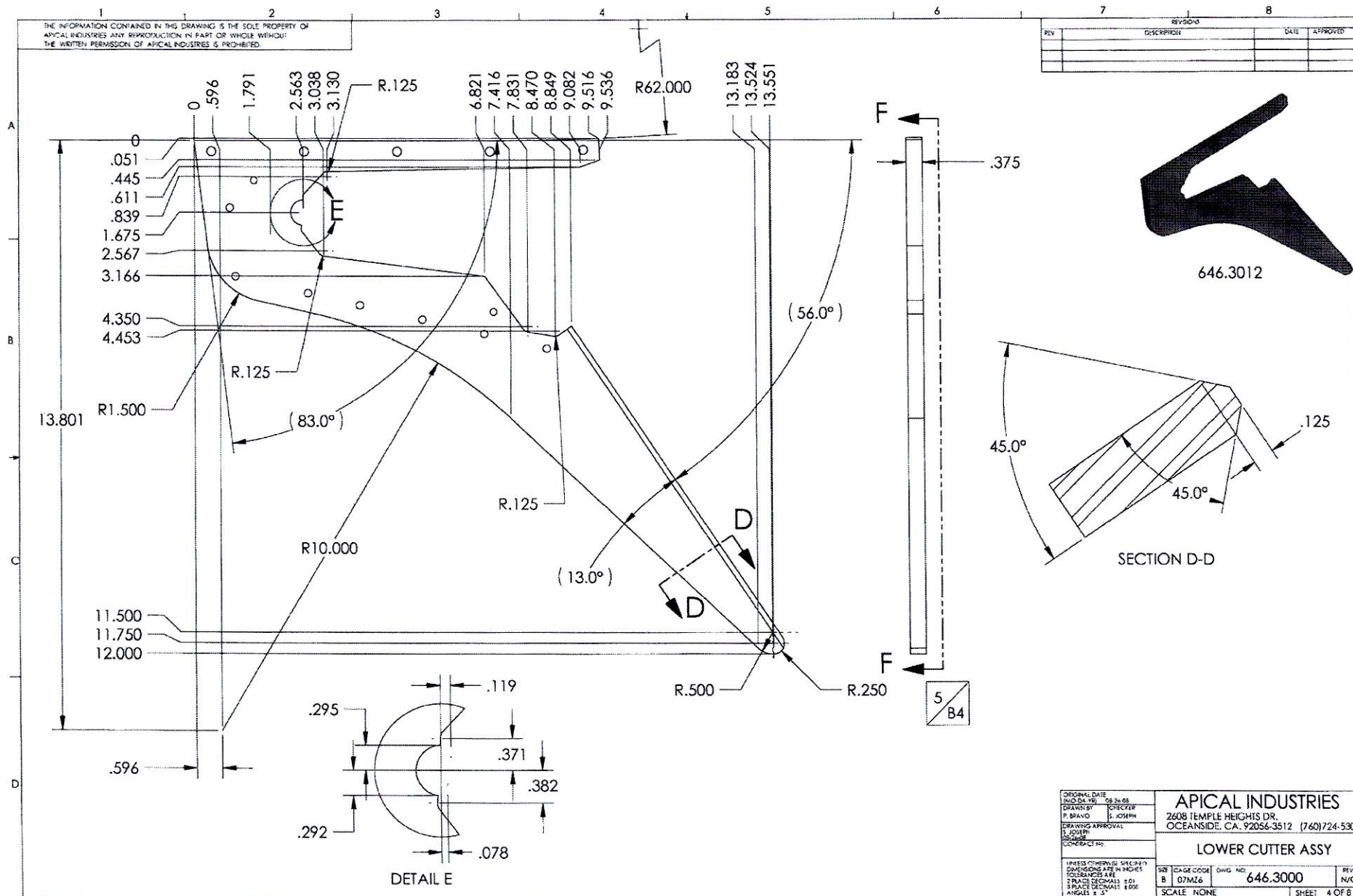


SECTION A-A

ORIGINAL DATE 10/20/91		APICAL INDUSTRIES	
DRAWN BY P. BAYO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY S. JOSEPH		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL S. JOSEPH		LOWER CUTTER ASSY	
CURRENTLY NO.		REV. NO.	REV.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS $\pm .01$ 2 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$		SCALE: NONE	SHEET 3 OF 8

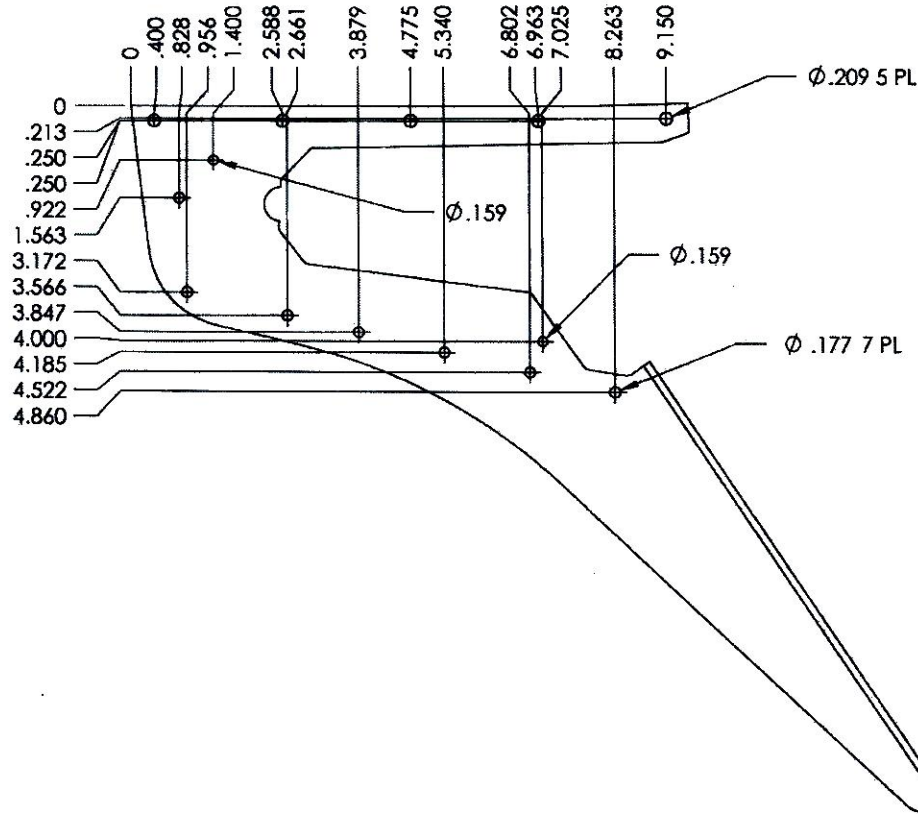
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



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THE WRITTEN PERMISSION OF APICAL INDUSTRIES IS PROHIBITED.

REV.	DESCRIPTION	DATE	APPROVED

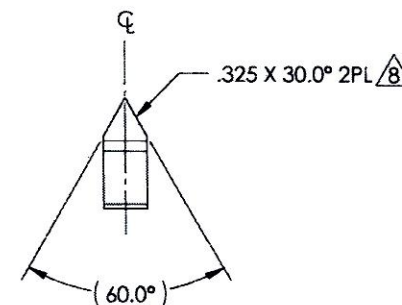
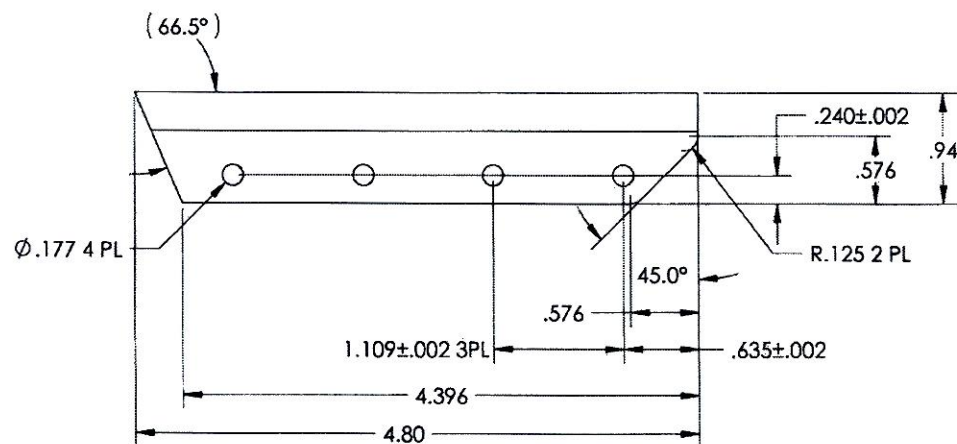
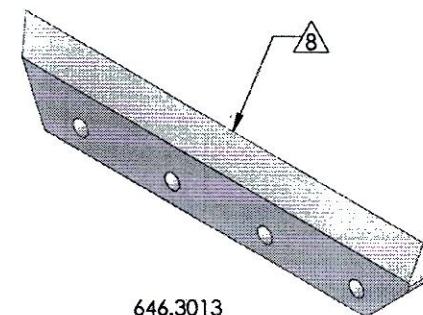


SECTION F-F 4
B6

ORIGINAL DATE 10/01/08 DESIGNED BY P. BRAVO DRAWING APPROVAL S. JOHNS CHECKED BY S. JOHNS		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES 2°		LOWER CUTTER ASSY	
REV. CODE	DWG. NO.	REV.	
B 07/02/06	646.3000	N/C	
SCALE: NONE		SHEET 5 OF 8	

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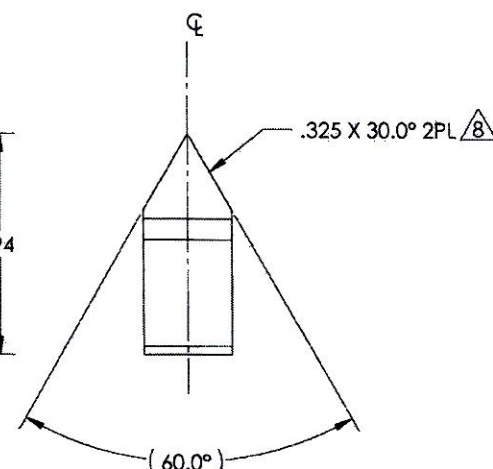
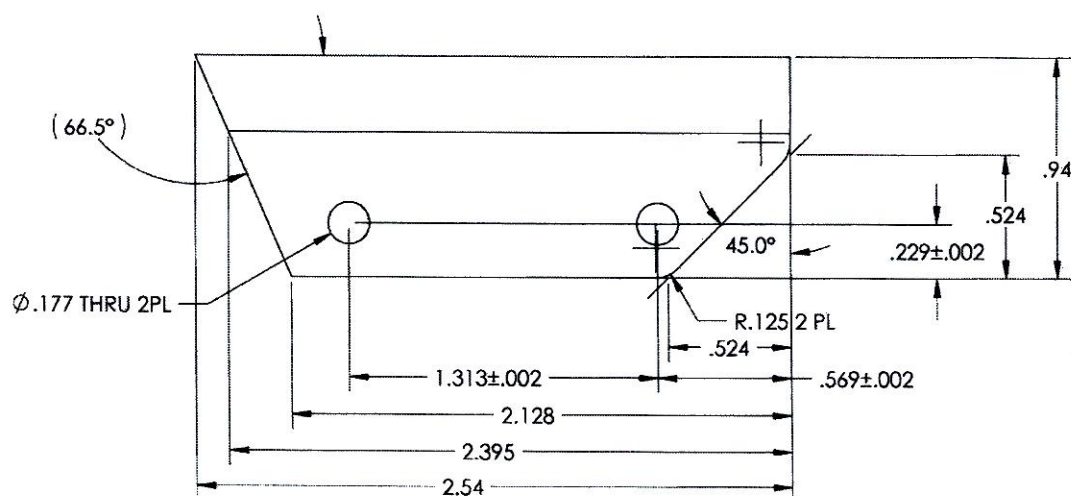
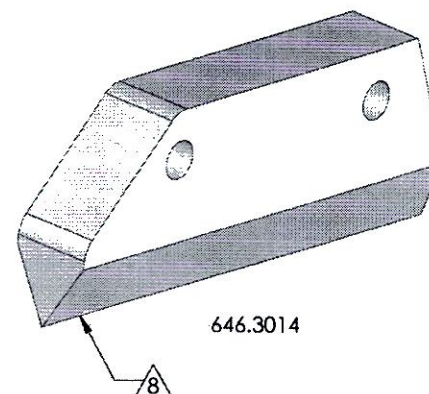
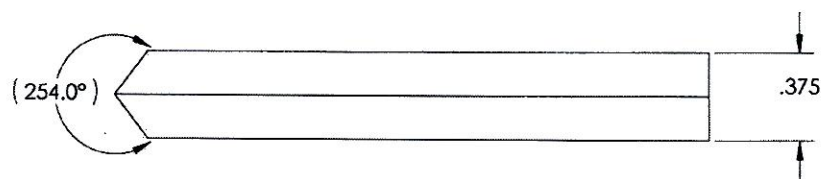
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE 10/04/01 DRAWN BY J. BRANCO CHECKED BY J. BRANCO DRAWING APPROVAL J. BRANCO SCALE CONTRACT NO.	APICAL INDUSTRIES 2608 TAMPA F HEIGHTS DR. GAITHERSBURG, CA. 92056-3512 (760) 724-5300
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 1 FRACTIONAL DIMENSIONS ± .01 2 DECIMAL DIMENSIONS ± .005 3 HOLE DIMENSIONS ± .010	SHEET NO. 07/16/01 SCALE NONE PARTS AND ASSEMBLY REV. N/C

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REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE
12/01/1991
DRAWN BY
P. BRAVO
CHECKED BY
S. JOSEPH
DRAWING APPROVAL
S. JOSEPH
12/01/91
CONTRACT NO.

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR
OCEANSIDE, CA. 92056-3512 (760)724-5300

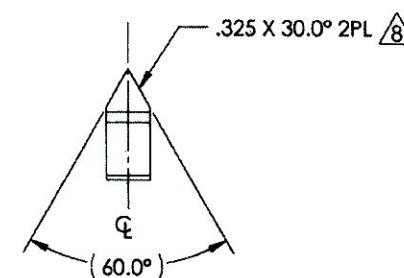
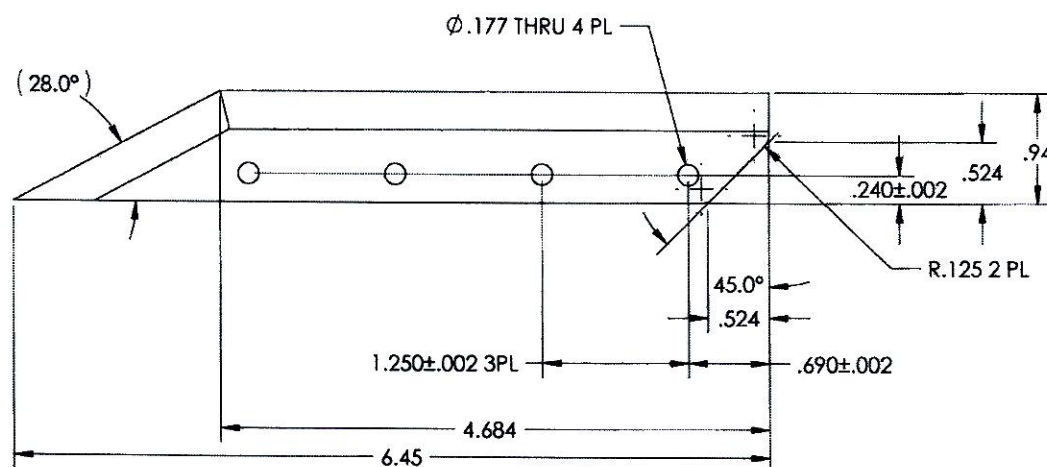
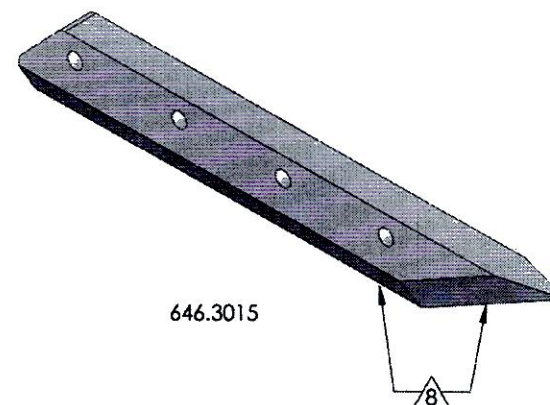
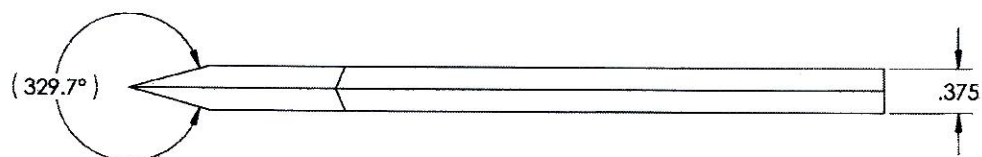
LOWER CUTTER ASSY

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
3 PLACE DECIMALS ± .01
2 PLACE DECIMALS ± .005
ANGLES ± 3°

SIZE CAGE CODE DWG NO. 646.3000 REV. N/C
B 07M16
SCALE NONE SHEET 7 OF 8

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REV	DESCRIPTION	DATE	APPROVED



ORIGINAL DATE INCHES: 1/8" 3/16" 1/4" 3/8" 1/2" 5/8" 3/4" 1" 1 1/4" 1 1/2" 2" 2 1/2" 3" 3 1/2" 4" 4 1/2" 5" 5 1/2" 6" 6 1/2" 7" 7 1/2" 8" 8 1/2" 9" 9 1/2" 10"		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY: P. SPAYO P. SPAYO DRAWING APPROVAL: L. JOSEPH REVIEW: CONTRACT NO.:		LOWER CUTTER ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.005 2 PLACE DECIMALS ±.002 ANGLES ±.5°		SER: B CASE CODE: 07M26 SCALE: NONE	DWG. NO: 646.3000 REV: N/C SHEET: 8 OF 8